

**TITLE: Conducting Structure of a Multi-layers IC Board**

**FIELD OF THE INVENTION**

The present invention relates to an improvement of a conducting structure of a multi-layers IC board, which can conduct each layer of IC  
5 board effectively and decreases the combined volume of the assembly.

**BACKGROUND OF THE INVENTION**

It is known that many new invention of technology is designed to be lighter and smaller for easy carriage and use. Hence, multi-layers IC  
10 board has been developed for application. It is known that a conducting wire (1) is used to conduct every layers of the IC board (2), as shown in Figure 1 to 4. The conducting wire (1) has its annular metal ring (12) to connect with an extended pin (13). The extended pin (13) and the ending pin (11) of the wire (1) are inserted into two neighborhood  
15 apertures (21) of the multi-layers IC board (2) and are welded for firm connection and conduction. But by the said method of connection between the pins and the IC board, the welding can not completely filled the whole aperture (21) that remains space therein, as shown in Figure 2. So the conducting effect is not good. Moreover, the conducting wire (1)  
20 is perpendicular to the IC board (2) that occupies a large volume even the wire (1) is bent as in Figure 4.

**SUMMARY OF THE INVENTION**

The present invention is to provide a conducting structure of a multi-layers IC board to overcome the drawback of the prior art and to decrease the assembled volume of the wire and the IC board. Now,  
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accompanying with the following drawings, the character of the present invention will be described here and after.

## BRIEF DESCRIPTION OF THE DRAWINGS

5       Figure 1 is an exploded perspective view showing a conventional conducting wire and a multi-layers IC board.

Figure 2 is an assembled perspective view of Figure 1.

Figure 3 is a perspective view of Figure 2 after being welded.

Figure 4 is across-sectional plan view of Figure 3.

10      Figure 5 is an exploded perspective view showing a conducting wire and a multi-layers IC board according to the present invention.

Figure 6 is an assembled perspective view of Figure 5.

Figure 7 is a perspective view of Figure 6 after being welded.

Figure 8 is across-sectional plan view of Figure 7.

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## DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to Figure 5 to 8, the present invention includes a conducting rod (3), which is received in an aperture (21) of a multi-layers IC board (2). Hence, the conducting rod (3) can contact with each layer 20 of the IC board effectively to provide certain conducting purpose therebetween. Each aperture (21) is provided with a conducting rod (3).

The conducting wire (1) is placed on the IC board (2) horizontally that makes its ending pin (11) and annular metal ring (13) contact with two neighborhood conducting rods (3) respectively. Then the wire (1) 25 can be welded on the board (2) to obtain a firm connection.

Accordingly, the rod (3) is effectively conductive with each layer

of the IC board (2) and the pin (11) and the metal ring (13) are capable of being connected with the rod (3) in secure. It is found that the conduction provided by the present invention will be better than the prior art. Furthermore, the conducting wire (1) is placed on the IC board (2) directly that occupies a smaller volume for effective application and improvement.